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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AMENDMENT "J"

APPLICANT(S): Takayuki Gomi et al. OLD DOCKET NO.: P97,2608  
NEW DOCKET NO.: 09792909-3746  
SERIAL NO.: 08/965,286 GROUP ART UNIT: 2811  
DATE FILED: November 6, 1997 EXAMINER: Ori. Nadav  
INVENTION: "SEMICONDUCTOR DEVICE INCLUDING HIGH SPEED  
TRANSISTORS AND HIGH VOLTAGE TRANSISTORS  
DISPOSED ON A SINGLE SUBSTRATE (As Amended)"

Hon. Assistant Commissioner for Patents  
Washington, DC 20231

S I R:

This Amendment "J" is filed in response to the Office Action of April 24, 2002. Please reconsider the application in view of the amendment and remarks presented below.

IN THE CLAIMS

Please amend claims 1, 3, 6 and 22 as follows:

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1. (Amended) A semiconductor device having a first vertical type bipolar transistor and a second vertical type bipolar transistor having a breakdown voltage that is higher than a breakdown voltage of the first vertical type bipolar transistor, said transistors each having an emitter, a base, and a collector, the semiconductor device comprising:

- a substrate of a first conductive type;
  - an epitaxial layer formed on the substrate;
  - a first embedded diffusion layer formed as a part of the first vertical type bipolar transistor in a first upper part of the substrate and in the epitaxial layer;
  - a second embedded diffusion layer formed as a part of the second vertical type bipolar transistor directly on the substrate, in a second upper part of the substrate,
- wherein the first embedded diffusion layer is not disposed within the second embedded diffusion layer,
- wherein the second embedded diffusion layer is of a second conductive type that is a different conductive type from the first conductive type substrate and includes an impurity

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SONNENSCHN, NATH & ROSENTHAL  
8000 Sears Tower  
233 S. Wacker Drive  
Chicago, IL 60606  
312/876-8000

2811 \$

IN RE APPLICATION OF: Takayuki Gomi, et al.

ATTORNEY DOCKET NO. 09792909-3746

SERIAL NO.: 08/965,286

GROUP ART UNIT: 2811

FILED: November 6, 1997

EXAMINER: O. Nadav

FOR: "SEMICONDUCTOR DEVICE INCLUDING HIGH SPEED TRANSISTORS AND HIGH VOLTAGE TRANSISTORS DISPOSED ON A SINGLE SUBSTRATE (As Amended)"

**AMENDMENT "J"**

Hon. Assistant Commissioner of Patents  
Washington D.C. 2023  
SIR:

Transmitted herewith is an amendment in the above-identified application.

☒ No additional claim fee is required.

The fee has been calculated as shown below.

CLAIMS AS AMENDED						
	(2) CLAIMS REMAINING AFTER AMENDMENT		(4) HIGHEST NO. PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEE
TOTAL CLAIMS		MINUS	20		( ) X 9.00 ( ) X 18.00	0.00
INDEP. CLAIMS		MINUS	3		( ) X 39.00 ( ) X 80.00	0.00
Application amended to contain any multiple dependent claims not previously paid for.				( ) YES ( ) NO	( ) \$130.00 ( ) \$260.00 ONE TIME	
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00	

\* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20 write "20" in this space.

■ Applicant petitions the Commissioner of Patents and Trademarks to extend this time for response to the Final Office Action dated April 24, 2002 for two month(s) so that the period for response is extended to September 24, 2002. The Commissioner is hereby authorized to charge American Express Account No. 378571697401002 in the amount of \$400.00 to cover the two-month extension fee. Form 2038 is attached.

- ☐ A check in the amount of \$\_\_ to cover the additional claim fee is enclosed.
- ☐ A check for \$\_\_ accompanying attached Terminal Disclaimer under 37 C.F.R. §1.321.
- ☐ A check for \$\_\_ and Petition

■ The Commissioner is hereby authorized to any additional fees which may be required, or to credit any overpayment to account No. 19-3140. A duplicate of this sheet is enclosed.

When phoning re this application, please call 312/876-8000 - Ext. 2606.

SONNENSCHN NATH & ROSENTHAL

BY Christopher P. Rauch (Reg. No. 45,034)  
Christopher P. Rauch

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231 on September 23, 2002

Christopher P. Rauch  
SIGNATURE  
September 23, 2002

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